

BIOLOGY, BACHELOR OF SCIENCE

Minimum Total Credit Hours: 120

Major Hours: 36

Minimum Upper-Division Hours: 48

Overall GPA - Combined and OU: 2.00

Major GPA - Combined and OU: 2.00

Program Code: B105

- 48 Upper-Division Hours Required.
- Some courses required for the major may also fulfill University General Education and/or College of Arts & Sciences Requirements

Major Requirements

Thirty-six hours of major coursework must be completed (exclusive of BIOL 1003, BIOL 1005, BIOL 1013, BIOL 1114, BIOL 1121, BIOL 1203, BIOL 2103, BIOL 2124, BIOL 2234, and BIOL 2255)

A grade of C or better must be earned in each course counted for major and major support credit.

Code	Title	Credit Hours
Biology		
BIOL 1124	Intro Biol: Molecule/Cell/Phys	4
BIOL 1134	Introductory Biology: Evolution, Ecology and Diversity	4
BIOL 2013	Evolution	3
BIOL 3333	Genetics	3
BIOL 4983	Senior Seminar (Capstone)	3
Electives		
Choose 16 hours ¹		16
Statistics		
Choose one of the following:		3
PSY 2113	Research Methods I: Statistics	
BIOL 2913	Intro to Quantitative Biology	
BIOL 4913	Quantitative Biology	
Total Credit Hours		36

¹ Electives - (16 hours) to be chosen in consultation with departmental advisor; must include two upper-division laboratory courses. (Independent study, honors reading or honors research cannot count toward laboratory course requirements.)

Major Support Requirements

Code	Title	Credit Hours
Chemistry		
CHEM 1315	General Chemistry	5
CHEM 1415	General Chemistry (Continued)	5
CHEM 3053	Organic Chemistry I: Biological Emphasis	3
CHEM 3152	Organic Chemistry Laboratory: Biological Emphasis	2
CHEM 3153	Organic Chemistry II: Biological Emphasis	3

or CHEM 3653 Introduction to Biochemistry

History of Science

Choose one of the following: ¹ 3

HSCI 3013 History of Science to the Age of Newton

HSCI 3023 History of Science Since the Seventeenth Century

An approved course in the ethics of biology or medicine chosen in consultation with departmental advisor

Physics

Choose one of the following: 8

PHYS 2414 General Physics for Life Science Oriented & PHYS 2424 Majors and General Physics for Life Science Oriented Majors

PHYS 2514 General Physics for Engineering and & PHYS 2524 Science Majors and General Physics for Engineering and Science Majors

Math

MATH 1743 Calculus I for Business, Life and Social Sciences 3

or MATH 1823 Calculus and Analytic Geometry I

Total Credit Hours 32

¹ Fulfills 1 of 2 upper-division College Western Civ., IV.

General Education and College Requirements

Courses graded P/NP will not apply

Courses for fulfillment of General Education and College of Arts & Sciences requirements must be from the approved General Education course list published in the Class Schedule or at <http://www.ou.edu/gedned/courses>.

University-Wide General Education (minimum 40 hours) and College of Arts and Sciences Requirements

Code	Title	Credit Hours
Core Area I: Symbolic and Oral Communication		
<i>English Composition (6 hours)</i>		
ENGL 1113	Principles of English Composition	3
ENGL 1213	Principles of English Composition	3
or EXPO 1213 Expository Writing		
<i>Foreign Language (0-13 hours in the same language)</i>		
The College of Arts and Sciences requirement cannot be met by high school coursework.		
Beginning Course		0-5
Beginning Course, continued		0-5
Intermediate Course (2000 level) ^{1,2}		0-3
<i>Mathematics (3 hours)</i>		
Choose one course from the General Education Mathematics list		3
Core Area II: Natural Science (7 hours, including one laboratory component)		

Biological Science

Choose an approved General Education Natural Science course with one of the following prefixes: BIOL, HES, MBIO, or PBIO¹ 3-4

Physical Science

Choose an approved General Education Natural Science course with one of the following prefixes: AGSC, ASTR, CHEM, GEOG, GEOL, GPHY, METR, or PHYS¹ 3-4

Core Area III: Social Science (6 hours)

P SC 1113 American Federal Government 3

Choose one course from the General Education Social Science list 3

Core Area IV: Humanities (18 hours)*Understanding Artistic Forms*

Choose one course from the General Education Artistic Forms list 3

Western Civilization and Culture

HIST 1483 United States, 1492 to 1865 3
or HIST 1493 United States, 1865 to the Present

Choose one course from the General Education Western Civilization & Culture list³ 3

Non-Western Culture

Choose one course from the General Education Non-Western Culture list 3

Additional Core IV Upper-Division Humanities courses⁴

Choose one course from Understanding Artistic Forms, Western Civilization & Culture, or Non-Western Culture¹ 3

Choose one course from Understanding Artistic Forms, Western Civilization & Culture, or Non-Western Culture¹ 3

Core Area V: Senior Capstone Experience (3 hours)

Choose one General Education Capstone course 3

Total Credit Hours 56

¹ College of Arts and Sciences Requirements: College requirements are not automatically fulfilled by a previous degree.

² One course at the intermediate level or demonstrated competency at that level

³ Excluding HIST 1483 and HIST 1493

⁴ 6 upper-division hours, 2 courses, at the 3000- 4000-level. **Must be outside the major.**

Free Electives

Electives to bring total applicable hours to the minimum total required for the degree including 48 upper-division hours.

Information Concerning General Rules, Regulations and Minimum Requirements

Arts and Sciences Hours: At least 80 semester hours of liberal arts and sciences courses are required for a BA degree. At least 55 semester hours of liberal arts and sciences courses are required for a BS degree.

Pass/No Pass Enrollment: A maximum of 16 semester hours of free elective credit may be attempted under this option.

Individual Studies (e.g., courses titled "Independent Study"): A maximum of 12 total semester hours may be counted toward graduation, excluding Honors Reading and Honors Research.

P.E. Courses: No physical education activity courses will be counted toward the 120 semester hours of acceptable credit for graduation.

Senior Institution Hours: A minimum of 60 semester hours applied toward graduation must be earned at senior (4-year) institutions.

Residency:

- At least 15 of the final 30 hours applied toward the degree or at least 50 percent of the hours required by the institution in the major field must be satisfactorily completed at the awarding institution.
- At least 15 semester hours of upper-division major work must be completed in residence at OU.
- OU correspondence courses are **not** considered resident credit.

Grade Point Averages: Students must earn a minimum over all 2.00 for each of the following: Combined Retention GPA (all college grades), OU Retention GPA, GPA for all major courses, and GPA for all major courses taken at OU. Some schools and departments of the College have higher minimum grade point averages required for their students.

Special Degrees: Students may qualify for an Honors degree (cum Laude, Magna cum Laude, or Summa cum Laude) by completing specific requirements of the Honors College. A degree will be earned with Distinction if the student completes at least 60 semester hours at OU with at least a 3.60 combined retention GPA and OU retention GPA. A degree will be earned with Special Distinction if the student completes at least 60 semester hours at OU with at least a 3.90 combined retention GPA and OU retention GPA.

Suggested Semester Plan of Study

This plan shows one possible grouping of courses that would allow students to graduate in four years. Please refer to the front of the degree checklist for official requirements. Students must consult with College of Arts and Sciences and/or Department of Biology academic advisors to verify that courses selected each semester fulfill the recommended plan and satisfy university, College of Arts and Sciences, and Biology major requirements.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 1113	Principles of English Composition (Core I)	3
HIST 1483 or HIST 1493	United States, 1492 to 1865 (Core IV) or United States, 1865 to the Present	3
MATH 1523	Precalculus and Trigonometry (Core I)	3
P SC 1113	American Federal Government (Core III)	3
BIOL 1124	Intro Biol: Molecule/Cell/Phys	4
Credit Hours		16
Second Semester		
CHEM 1315	General Chemistry	5
ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
MATH 1743 or MATH 1823	Calculus I for Business, Life and Social Sciences or Calculus and Analytic Geometry I	3
BIOL 1134	Introductory Biology: Evolution, Ecology and Diversity	4
Credit Hours		15

Sophomore**First Semester**

CHEM 1415	General Chemistry (Continued)	5
PHYS 2414 or PHYS 2514	General Physics for Life Science Oriented Majors or General Physics for Engineering and Science Majors	4
BIOL 2013	Evolution	3
Understanding Artistic Forms (Core IV)		3
Credit Hours		15

Second Semester

CHEM 3053	Organic Chemistry I: Biological Emphasis	3
PHYS 2424 or PHYS 2524	General Physics for Life Science Oriented Majors or General Physics for Engineering and Science Majors	4
Statistics Requirement		3
Beginning Foreign Language (Core I)		5
Credit Hours		15

Junior**First Semester**

CHEM 3153 or CHEM 3653	Organic Chemistry II: Biological Emphasis or Introduction to Biochemistry	3
CHEM 3152	Organic Chemistry Laboratory: Biological Emphasis	2
BIOL 3333	Genetics	3
Beginning Foreign Language continued (Core I)		5
Free Elective, upper-division (3000-4000-level)		3
Credit Hours		16

Second Semester

HSCI 3013 or HSCI 3023	History of Science to the Age of Newton or History of Science Since the Seventeenth Century	3
Intermediate Foreign Language		3
Non-Western Culture (Core IV)		3
BIOL Major Group Requirement, upper-division (3000-4000-level)		3
BIOL Major Group Requirement with Lab, upper-division (3000-4000-level)		4
Credit Hours		16

Senior**First Semester**

BIOL Major Group Requirement, upper-division (3000-4000-level)		3
BIOL Major Group Requirement with Lab, upper-division (3000-4000-level)		3
Humanities, upper-division (3000-4000-level) outside major (Gen.Ed.)		3
Western Civilization & Culture (Core IV)		3
Free Elective, upper-division (3000-4000-level)		4
Credit Hours		16

Second Semester

BIOL 4983	Senior Seminar (Capstone)	3
Major Group Requirement, upper-division (3000-4000-level)		3

Social Science (Core III)	3
Free Electives, upper-division (3000-4000-level)	6
<hr/>	
Credit Hours	15
<hr/>	
Total Credit Hours	124